

## FY 2017 CPO FFO

### ANNOUNCEMENT OF FEDERAL FUNDING OPPORTUNITY

#### EXECUTIVE SUMMARY

Federal Agency Name(s): Oceanic and Atmospheric Research (OAR), National Oceanic and Atmospheric Administration (NOAA), Department of Commerce

Funding Opportunity Title: Climate Program Office FY 2017

Announcement Type: Initial

Funding Opportunity Number: NOAA-OAR-CPO-2017-2004896

Catalog of Federal Domestic Assistance (CFDA) Number: 11.431, Climate and Atmospheric Research

Dates: Full applications for all Competitions, with the exception of the two MAPP Program competitions, must be received by 5:00 p.m. Eastern Time, October 24, 2016. Full applications for the two MAPP Program competitions must be received by 5:00 p.m. ET on October 31, 2016.

#### 1. Letters of Intent

Letters of intent (LOIs) for all competitions (with the exception of the two MAPP Program competitions) should be received by email by 5:00 p.m. ET on August 24, 2016. Letters of Intent for the two MAPP Program competitions should be received by email 5:00 p.m. ET on August 26, 2016. A response to the LOI from the Competition Manager (e-mail or letter) will be sent to the investigator within four weeks after the LOI's due date encouraging or discouraging a full application based on its relevance to the targeted Competition.

#### 2. Full Applications

Full applications for all competitions (with the exception of the two MAPP Program competitions) must be received by 5:00 p.m. ET on October 24, 2016. Full applications for the two MAPP Program competitions must be received by 5:00 p.m. ET on October 31, 2016. Applications received after this time will not be considered for funding. Applications must be submitted via <http://www.grants.gov>. For applications submitted through grants.gov, the basis for determining timeliness is the receipt notice issued by

<http://www.grants.gov>, which includes the date and time received. Emailed or faxed copies of applications will not be accepted.

For applicants without internet access, please contact the CPO Grants Manager Diane Brown by mail at NOAA Climate Program Office (R/CP1), SSMC3, Room 12734, 1315 East-West Highway, Silver Spring, MD 20910 to obtain an application package. Please allow two weeks after receipt for a response. Hard copy submissions will be date and time stamped when they are received in the Climate Program Office.

Funding Opportunity Description: The National Oceanic and Atmospheric Administration (NOAA) is focused on providing the essential and highest quality environmental information vital to our Nation's safety, prosperity and resilience. Toward this goal, the agency conducts and supports weather and climate research, oceanic and atmospheric observations, modeling, information management, assessments, interdisciplinary decision-support research, outreach, education, and partnership development.

Climate variability and change present society with significant economic, health, safety, and security challenges and opportunities. In meeting these challenges, and as part of NOAA's climate portfolio within the Office of Oceanic and Atmospheric Research (OAR), the Climate Program Office (CPO) advances scientific understanding, monitoring, and prediction of climate and its impacts, to enable effective decisions. These investments are key to NOAA's mission of "Science, Service, and Stewardship" and are guided by the agency's vision to create and sustain enhanced resilience in ecosystems, communities, and economies.

Within this context, CPO manages competitive research programs through which NOAA funds high-priority climate science, assessments, decision support research, outreach, education, and capacity-building activities designed to advance our understanding of the Earth's climate system, and to foster the application and use of this knowledge to improve the resilience of our Nation and its partners. CPO supports research that is conducted across the United States and internationally. CPO also provides strategic guidance for the agency's climate science and services programs and supports NOAA's contributions to the U.S. Global Change Research Program (USGCRP) and its National Climate Assessment, and similar international endeavors such as the Global Framework for Climate Services.

CPO's climate research portfolio is designed to achieve a fully integrated research and applications program. We meet this objective through a focus on climate intelligence and climate resilience, in support of NOAA's goals.

Climate intelligence defines CPO's technical strength through its foundational

capabilities, which include (1) Observations and monitoring, (2) Research to advance scientific understanding, (3) Modeling and prediction, (4) Communication, education, and engagement, and, (5) Climate and societal interactions. A focus on climate resilience leverages CPO's climate intelligence to advance capabilities for responding to the urgent and growing demand for reliable, trusted, transparent, and timely climate information needed to sustain all sectors of our economy and environment. CPO's strategy addresses challenges in the areas of, (1) Weather and climate extremes, (2) Climate impacts on water resources, (3) Coasts and climate resilience, (4) Sustainability of marine ecosystems, and (5) Changing atmospheric composition and its impacts. Making progress in addressing climate-related societal challenges and realizing benefits for NOAA's public and private partners, requires that these mission-focused capabilities be integrated across CPO to align research, applications, transitions, and operations, and to meet the information needs of a resilient society.

NOAA envisions a Nation that is prepared for, thriving, and resilient to climate variability and change. CPO's activities support a unique and highly flexible climate research enterprise to improve scientific understanding of climate variability and change and to enable businesses and communities to derive the benefits of this investment in the present and into the future. Effectively coordinating across these components through the development and deployment of end-to-end research-based integrated information systems that address needs of high societal relevance, have been hallmarks of CPO's success in linking environmental intelligence to resilience. Key components in this enterprise are Annual Federal Funding Opportunities, competitive grants programs and other types of support that advance and extend NOAA's foundational capabilities and applications research. Proficiency in these core areas ensures that CPO's infrastructure is always in place to meet the intelligence and resilience challenges of our changing climate.

NOAA, OAR, and the Climate Program Office encourage applicants and awardees to support the principles of diversity and inclusion when writing their proposals and performing their work. Diversity is defined as a collection of individual attributes that together help organizations achieve objectives. Inclusion is defined as a culture that connects each employee to the organization. By promoting diversity and inclusion you can improve creativity, productivity, and the vitality of the research community.

## FULL ANNOUNCEMENT

### I. Funding Opportunity Description

#### A. Program Objective

The National Oceanic and Atmospheric Administration (NOAA) is focused on providing the essential and highest quality environmental information vital to our Nation's safety, prosperity and resilience. Toward this goal, the agency conducts and

supports weather and climate research, oceanic and atmospheric observations, modeling, information management, assessments, interdisciplinary decision-support research, outreach, education, and partnership development.

Climate variability and change present society with significant economic, health, safety, and security challenges and opportunities. In meeting these challenges, and as part of NOAA's climate portfolio within the Office of Oceanic and Atmospheric Research (OAR), the Climate Program Office (CPO) advances scientific understanding, monitoring, and prediction of climate and its impacts, to enable effective decisions. These investments are key to NOAA's mission of "Science, Service, and Stewardship" and are guided by the agency's vision to create and sustain enhanced resilience in ecosystems, communities, and economies.

Within this context, CPO manages competitive research programs through which NOAA funds high-priority climate science, assessments, decision support research, outreach, education, and capacity-building activities designed to advance our understanding of the Earth's climate system, and to foster the application and use of this knowledge to improve the resilience of our Nation and its partners. CPO supports research that is conducted across the United States and internationally. CPO also provides strategic guidance for the agency's climate science and services programs and supports NOAA's contributions to the U.S. Global Change Research Program (USGCRP) and its National Climate Assessment, and similar international endeavors such as the Global Framework for Climate Services.

CPO's climate research portfolio is designed to achieve a fully integrated research and applications program. We meet this objective through a focus on climate intelligence and climate resilience, in support of NOAA's goals.

Climate intelligence defines CPO's technical strength through its foundational capabilities, which include (1) Observations and monitoring, (2) Research to advance scientific understanding, (3) Modeling and prediction, (4) Communication, education, and engagement, and, (5) Climate and societal interactions. A focus on climate resilience leverages CPO's climate intelligence to advance capabilities for responding to the urgent and growing demand for reliable, trusted, transparent, and timely climate information needed to sustain all sectors of our economy and environment. CPO's strategy addresses challenges in the areas of: (1) Weather and climate extremes, (2) Climate impacts on water resources, (3) Coasts and climate resilience, (4) Sustainability of marine ecosystems, and (5) Changing atmospheric composition and its impacts. Making progress in addressing climate-related societal challenges and realizing benefits for NOAA's public and private partners, requires that these mission-focused capabilities

be integrated across CPO to align research, applications, transitions, and operations, and to meet the information needs of a resilient society.

NOAA envisions a Nation that is prepared for, thriving, and resilient to climate variability and change. CPO's activities support a unique and highly flexible climate research enterprise to improve scientific understanding of climate variability and change and to enable businesses and communities to derive the benefits of this investment in the present and into the future. Effectively coordinating across these components through the development and deployment of end-to-end research-based integrated information systems that address needs of high societal relevance, have been hallmarks of CPO's success in linking environmental intelligence to resilience. Key components in this enterprise are Annual Federal Funding Opportunities, competitive grants programs and other types of support that advance and extend NOAA's foundational capabilities and applications research. Proficiency in these core areas ensures that CPO's infrastructure is always in place to meet the intelligence and resilience challenges of our changing climate.

#### B. Program Priorities

CPO supports competitive research through three major program areas: Climate Observations and Monitoring (COM); Earth System Research and Modeling (ESRM); and Climate and Societal Interactions (CSI). Through this Announcement, CPO's activities are seeking applications for seven individual competitions in FY 2017. Prior to submitting applications, investigators are highly encouraged to learn more about CPO and its Programs, as well as specific Program priorities for FY 2017.

*This information, along with the names and contact information of relevant Competition Managers, is provided in information sheets that can be found at the following website: <http://cpo.noaa.gov/GrantsandProjects.aspx>.*

The seven competitions covered by this Announcement are as follows:

1. COM - Ocean climate information and products
2. COM - Global change climate indicators and data products for assessment
3. AC4 - Synthesis Research: Urban Emissions and Emissions from Oil and Gas Sector
4. CVP - Observing and Understanding Processes Affecting the Propagation of Intraseasonal Oscillations in the Maritime Continent Region
5. MAPP - Advancing drought understanding, monitoring and prediction
6. MAPP - Research to explore seasonal prediction of coastal high water levels and changing living marine resources
7. COCA – Supporting Resilient Coastal Communities in a Changing Climate

## **Climate Observations and Monitoring (COM)**

COM's mission is to provide long-term, high quality, timely, global observational data, information and products in support of climate, Arctic, weather, and ocean research communities, forecasters, and other service providers and users, for the benefit of society. COM supports research to develop informational products, diagnostics, and assessments of observed climate variability and change on global to regional scales.

### **1. COM - Ocean Climate Information and Products**

Projects are solicited that utilize NOAA's and others Ocean Observing assets to create global or regional ocean indices targeted toward the scientific community that will advance the monitoring and understanding of large-scale features and variability of the ocean climate system. Example targets could be (1) Informing the understanding of regional ocean dynamics and (2) identifying model biases or improving performance in ocean processes, and proposals should clearly show a pathway by which information gained from these projects would benefit downstream (e.g. forecasting or decision making) applications.

### **2. COM - Climate Indicators and Datasets for Assessments**

Projects are solicited that will develop and test indicators which could provide a clear and concise way of communicating to the public and decision makers the status and trends of physical drivers of the climate system. These projects will be part of a robust upstream effort of the USGCRP indicators system (<http://www.globalchange.gov/explore/indicators>) to produce sustained indicators of climate change and variability. This competition is co-supported by the CPO Assessments Program.

## **Atmospheric Chemistry, Carbon Cycle, and Climate (AC4)**

AC4 is a competitive research program that incorporates research on atmospheric chemistry and carbon cycle. The program aims to provide a process-level understanding of the climate system through observation, modeling, analysis, and field studies to support the development and improvement of models and ultimately predictions. In collaboration with NOAA Laboratories and academic community, AC4 program supports research on atmospheric trace gases (including greenhouse gases), aerosols and their precursors in connection with field studies, regional and global climate and Earth System modeling, as well as research on atmospheric components of nitrogen cycle.

### **3. AC4 - Synthesis Research: Urban Emissions and Emissions from Oil & Gas Sector.**

The FY17 AC4 announcement builds on the wealth of collected atmospheric measurements of emissions from oil & gas sector, as well as a number of studies

focused on emissions from urban regions to support synthesis efforts, including analysis and modeling of emissions and chemistry. Multi PI projects synthesizing several aspects of a particular geographical region or those which involve a synthesis across several geographical regions with common science objectives are solicited.

### **Climate Variability and Predictability Program (CVP)**

CVP supports research that enhances our process-level understanding of the climate system through observation, modeling, analysis, and field studies. This vital knowledge is needed to improve climate models and predictions so that scientists and society can better anticipate the impacts of future climate variability and change.

#### **4. CVP - Observing and Understanding Processes Affecting the Propagation of Intraseasonal Oscillations in the Maritime Continent Region**

In FY17, the Climate Variability and Predictability (CVP) Program solicits proposals that aim to improve understanding of processes that affect the propagation (speed, intensity, disruption, geographic placement) of intraseasonal oscillations in the Maritime Continent and broader region by using a combination of in situ and remote observations, data analysis, modeling, and/or theoretical understanding of local and remote processes.

The NOAA CVP Program expects to partner with the Office of Naval Research (ONR) and US CLIVAR agencies (NOAA, NSF, NASA, DOE) to leverage activities of the Propagation of Intra-Seasonal Tropical Oscillations (PISTON) Departmental Research Initiative. The NOAA CVP effort is expected to coordinate with the ONR PISTON effort, the NASA Cloud-Aerosol-Monsoon Philippines Experiment (CAMPEX), and YMC observational campaigns to augment these planned activities. It is expected that the CVP component of the overall joint effort will include ship-based process-level field observations as well as modeling experiments.

The core work in the proposal should be three years in length however, if well-justified, one additional year to allow for sufficient time for pre-cruise preparation or post-field analysis and modeling will be considered. Projects will start either in FY17 or FY18, depending on the needs of the project and the availability of funding. Interactions, partnerships, or collaborations with NOAA laboratories and centers are encouraged.

### **Modeling, Analysis, Predictions, and Projections (MAPP) Program**

MAPP's mission is to enhance the Nation's capability to understand and predict natural variability and changes in Earth's climate system. The MAPP Program supports development of advanced climate modeling technologies to improve simulation of climate variability, prediction of future climate variations from weeks to decades, and projection of long-term future climate conditions. To achieve its mission, the MAPP

Program supports research focused on the coupling, integration, and application of Earth system models and analyses across NOAA, among partner agencies, and with the external research community.

## **5. MAPP - Advancing Drought Understanding, Monitoring and Prediction**

To enable societies to cope with drought, improved capabilities as part of the National Integrated Drought Information System (NIDIS) are needed. To improve drought capabilities, research proposals are solicited to advance the understanding, monitoring, and prediction of drought as part of NOAA's Drought Task Force activities with a focus on improved understanding of predictability relevant to drought, model development activities, advancing operational monitoring and prediction systems, and developing new monitoring and forecast products.

## **6. MAPP - Research to Explore Seasonal Prediction of Coastal High Water Levels and Changing Living Marine Resources**

Seasonal variations in ocean conditions can influence the frequency and severity of coastal flooding and alter the distribution and abundance of fish stocks and other economically valuable living marine resources. Exploratory research proposals are solicited to explore seasonal prediction of coastal high water levels and changing living marine resources to help establish foundational elements of emergent integrated information systems.

## **Climate and Societal Interactions (CSI)**

CSI's mission is to improve resilience and preparedness in diverse socio-economic regions and sectors throughout the US and abroad through the use of climate knowledge and information. Our research advances the nation's understanding of climate-related risks and vulnerabilities across sectors and regions, and the development of tools to foster more informed decision making. These efforts support NOAA's vision to create and sustain enhanced resilience in ecosystems, communities, and economies.

## **7. CSI/Coastal and Ocean Climate Applications (COCA) - Supporting Resilient Coastal Communities in a Changing Climate**

Coastal communities are at many different stages of adaptation to climate related risks and stressors. While some have demonstrated success in adaptation planning and implementation, that is not the norm. Proposals are solicited to advance the knowledge



and capacity of coastal communities<sup>1</sup> by promoting collaborations between scientists and coastal decision-makers to support the development of approaches to enhance coastal community resilience and sustainability in a changing climate.

Please note that the Regional Integrated Sciences and Assessments (RISA) call for proposals will be released as a separate FFO at a later date.

Please note that the Coastal and Ocean Climate Applications (COCA) - Understanding Climate Impacts on Fish Stocks and Fisheries to Inform Sustainable Management call for proposals will be released as a separate FFO.

*Information sheets containing further details and Points of Contact for each competition can be found at <http://cpo.noaa.gov/GrantsandProjects.aspx>.*

### **C. Program Authority**

49 U.S.C. 44720(b), 15 U.S.C. 2904, 15 U.S.C. 2931-2934

## **II. Award Information**

### **A. Funding Availability**

In FY 2017, approximately \$10 million will be available for approximately 90 new awards pending budget appropriations (see section I.B above). It is anticipated that most awards will be at a funding level between \$50,000 and \$300,000 per year with exceptions for larger awards. Federal funding for FY 2018 may be used to fund some awards submitted under this Federal Funding Opportunity. Current or previous grantees are eligible to apply for a new award that builds on, but does not replicate, activities covered in existing or previous awards. Current grantees should not apply for supplementary funding through this announcement.

#### **1. Climate Observations and Monitoring (COM)**

It is anticipated that approximately \$2 million will be available for new starts in FY17 for COM competitions. Projects for COM Competitions should be at a funding level between \$75,000 - 150,000 per year. Two or three year proposals are requested for Competition 1. Proposals of one or two years are requested for Competition 2.

#### **2. Atmospheric Chemistry, Carbon Cycle and Climate (AC4)**

---

<sup>1</sup> A “coastal community” is defined as one or more coastal counties, cities, towns, neighborhoods, and/or tribes. Tribes do not need to be federally recognized in order to be eligible for this funding opportunity.

It is anticipated the \$1.5 million will be available for FY17 new starts for the AC4 competition. Two or three year proposals are requested. Total proposal budget cannot exceed \$1,500,000, spread equally or unequally across the duration of the project.

### 3. Climate Variability Program (CVP)

It is anticipated that CVP \$2 million will be available for new starts in FY17 CVP competition. Projects for CVP competition should be at a funding level between \$75,000 - 250,000 per year, including costs for data management. Two or three year proposals are requested, however, if well-justified, one additional year to allow for sufficient time for pre-cruise preparation or post-field analysis and modeling will be considered. Projects will start either in FY17 or FY18, depending on the needs of the project and the availability of funding.

### 4. Modeling, Analysis, Predictions, and Projections (MAPP)

It is anticipated that \$3 million will be available in FY 2016 for new projects for the MAPP competitions.

- A. Advancing Drought Understanding, Monitoring and Prediction. Two types of proposals are requested through this competition. Type 1 (individual) proposals may request up to \$170,000 per year, not including potential additional costs for data sharing and/or archiving (see information sheet for details), while Type 2 (team) proposals may request up to \$600,000 per year. See information sheet for further information.
- B. Research to explore seasonal prediction of coastal high water levels and living marine resources. Individual and team proposals are requested through this competition. Individual proposals may request up to \$170,000 per year, not including potential additional costs for data sharing and/or archiving (see information sheet for details), whereas team proposals may request up to \$600,000 per year. See information sheet for further information.

### 5. Climate and Societal Interactions

It is anticipated the \$800K will be available for new starts in FY17 for the COCA competition. Projects for the COCA competition should be primarily in the \$50,000 - \$150,000/year range, including potential costs for data sharing and/or archiving. Total proposal budget cannot exceed \$300,000.

*For more detail on funding availability, please see the information sheets available for the individual competitions at <http://www.cpo.noaa.gov/opportunities>.*

### B. Project/Award Period

1. Climate Observations and Monitoring: Projects are expected to be funded for up to 2 years for Competition 1 and up to 3 years for Competition 2.

2. AC4 Projects are expected to last 2-3 years.

3. CVP projects: Two or three year proposals are requested, however, if well-justified, one additional year to allow for sufficient time for pre-cruise preparation or post-field analysis and modeling will be considered.

4. Modeling, Analysis, Predictions, and Projections Program projects will be funded for up to three years for both competitions.

5. Climate and Societal Interactions:  
COCA awards are expected to last 1-2 years.

#### C. Type of Funding Instrument

The funding instrument for awards will be a grant. If, however, it is anticipated that NOAA will be substantially involved in the implementation of the project, the grant may be administered as a cooperative agreement. Examples of substantial involvement may include, but are not limited to, applications for collaboration between NOAA scientists and a recipient scientist or contemplation by NOAA of detailing Federal personnel to work on proposed projects. NOAA will make decisions regarding the use of a cooperative agreement on a case-by-case basis. Funding for contractual arrangements for services and products for delivery to NOAA is not available under this announcement.

If the applicant is at an institution that has a NOAA Cooperative Institute (CI), the applicant is encouraged to submit a proposal that references the CI by attaching a cover letter to the proposal stating the desire to have the grant associated with the CI. This letter should specify the name of the cooperative institute, the CI cooperative agreement number, and the NOAA-approved research theme and task that applies to the proposal. The proposal will use the Facilities and Administrative (F&A) rate associated with the main CI agreement.

If the proposal is selected for funding, NOAA will notify the university that a separate award will be issued with its own award number. However, the award will include two Special Award Conditions (SACs): (1) the existing University/NOAA Memorandum of Agreement (MOA) would be incorporated by reference into the terms of the competitive award, and (2) any performance report(s) for the competitive project must follow the

timetable of the CPO funding program and be submitted directly to the CPO funding program. Report(s) will be copied to the CI's administrator when due, to be attached to the main cooperative agreement progress report as an appendix. This will allow the CI to coordinate all the projects submitted through the CI, since the terms of these awards will specify that this is a CI project via the MOA.

### III. Eligibility Information

#### A. Eligible Applicants

Eligible applicants are institutions of higher education, other nonprofits, commercial organizations, international organizations, and state, local and Indian tribal governments. Federal agencies interested in receiving financial support for projects should contact the appropriate competition manager.

#### B. Cost Sharing or Matching Requirement

None.

#### C. Other Criteria that Affect Eligibility

None.

### IV. Application and Submission Information

#### A. Address to Request Application Package

Application packages are available at Grants.gov (<http://www.grants.gov>) at the link "Apply for Grants." For applicants without Internet access, please contact the CPO Grants Manager, Diane Brown, by mail at NOAA Climate Program Office (R/CP1), SSMC3, Room 12734, 1315 East-West Highway, Silver Spring, MD 20910 to obtain an Application Package. Please allow two weeks after receipt for a response.

#### B. Content and Form of Application

##### 1. Letter of Intent (LOI)

The purpose of the LOI process is to provide information to potential applicants on the relevance of their proposed project to the Competition in advance of preparing a full application. Full applications will be encouraged only for LOIs deemed relevant. Applicants who have not been encouraged may still submit a full application. While LOIs are strongly encouraged, applicants are not required to submit them and may submit a full application even if they have not submitted an LOI.

LOIs should be submitted by email to the identified NOAA Competition Manager by the deadline specified in section IV.C below. The LOI should provide a concise description

of the proposed work and a statement regarding its relevance to the targeted Competition. The LOI should be no more than two pages in length and should include the items listed below. If these items are not included or the LOI is submitted late, the LOI may not be considered:

- Identification of the Competition that is being targeted in the LOI.
- A tentative project title.
- Name(s) and institution(s) of the Lead Principal Investigator(s) and other Principal Investigator(s).
- Statement of the problem.
- Brief summary of work to be completed, methodology to be used, data sets needed or to be collected.
- Approximate cost of the project.
- Relevance to the Competition that is being targeted.

A response to the LOI from the Competition Manager (e-mail or letter) will be sent to the investigator within four weeks after the LOI's due date encouraging or discouraging a full application based on its relevance to the targeted Competition. The final decision to submit a full application will be made by the investigator.

## 2. Full Application

Failure to comply with these provisions will result in applications being returned without review. Full applications are limited to 35 pages, single spaced, using 12-point font type with one-inch margins on standard 8.5 by 11 inch paper. For full applications with three or more Principal Investigators, the page limit is increased to 40. The page limit includes:

- The title page
- Abstract
- Results from prior research
- Statement of work
- Budget justification
- Budget table
- Vitae
- Current and pending support
- Associated figures
- References
- Appendices (e.g Letters of Support, Data management and sharing plans). This is not included in the official page count.

For applications to the MAPP Competitions, the form to request the use of NOAA's high-performance computing platforms is considered part of the full proposal, but it will not be included in the page count.

The full proposal and Indirect Cost Rate Agreement (IDCRA) should be put into one electronic file. The budget table/justification should be submitted in a file labeled budget narrative. The Federal Forms (SF424, SF424A, SF424B, CD511) and other mandated forms should be inserted in separate files when submitted and are not included in the page count.

The following forms and elements are required in each application.

(1) Title page: The title page shall identify the Principal Investigator(s) (PI) and institutional representative and clearly indicate which Competition is being addressed by name and Competition number. The title page should also include co-PIs from Federal Institutions. If more than one investigator is listed on the title page, please identify the lead investigator. The lead PI and institutional representative should be identified by: full name, title, organization, telephone number, email, and address. For paper submissions, the lead PI and the institutional representative must sign the title page. The total amount of Federal funds being requested should be listed for each budget period. If there are several institutions submitting separate applications associated with the same project, the names of all component institutions along with their lead PI name, e-mail, and amount requested per year must also appear on the title page of all applications that anticipate being funded under the same project.

(2) Abstract: A one-page abstract must be included and should contain the project title, an introduction to the problem, rationale, and a brief summary of the work to be completed. Abstracts must identify the name of the Competition that is being targeted and must also include a paragraph describing the work's relevance to the Competition that is being targeted as well as NOAA's long-term climate goals stated in section I.A. For multiple applications associated with the same project, the abstract must be identical in all applications. Failure to include this paragraph can result in the application being denied without additional review.

(3) Results from prior research: The results of each prior research project led by the Principal Investigator(s) during the last three years relevant to the proposed effort should be summarized in brief paragraphs. Because NOAA believes it is important that data sets developed with its support should be shared with the scientific community, PIs should also indicate how and when they have made their data accessible and useable by the community in the past. This section should not exceed two pages. For multiple

applications associated with the same project, this section must be identical in all applications.

(4) Statement of work: The proposed project must be completely described, including identification of the problem, scientific objectives, proposed methodology, and relevance to the Competition to which you are submitting the proposal and to NOAA's long-term climate goal. Benefits of the proposed project to the general public and the scientific community should be discussed. The statement of work, excluding references, figures, and other visual materials, must not exceed 15 pages of text. Applications from three or more investigators may include a statement of work containing up to 20 pages of overall project description. For multiple applications associated with the same project, all applications must have an identical statement of work, including a clear statement of the roles and responsibilities of each applicant.

(5) Data/Information Sharing Plan:

Environmental data and information collected or created under NOAA grants or cooperative agreements must be made discoverable by and accessible to the general public, in a timely fashion (typically within two years), free of charge or at no more than the cost of reproduction, unless an exemption is granted by the NOAA Program. Data should be available in at least one machine-readable format, preferably a widely-used or open-standard format, and should also be accompanied by machine-readable documentation (metadata), preferably based on widely used or international standards.

Proposals submitted in response to this Announcement must include a Data Management Plan of up to two pages describing how these requirements will be satisfied. The Data Management Plan should be aligned with the Data Management Guidance provided by NOAA in the Announcement. The contents of the Data Management Plan (or absence thereof), and past performance regarding such plans, will be considered as part of proposal review. A typical plan should include descriptions of the types of environmental data and information expected to be created during the course of the project; the tentative date by which data will be shared; the standards to be used for data/metadata format and content; methods for providing data access; approximate total volume of data to be collected; and prior experience in making such data accessible. The costs of data preparation, accessibility, or archiving may be included in the proposal budget unless otherwise stated in the Guidance. Accepted submission of data to the NOAA National Centers for Environmental Information (NCEI) is one way to satisfy data sharing requirements; however, NCEI is not obligated to accept all submissions and may charge a fee, particularly for large or unusual datasets. NOAA may, at its own discretion, make publicly visible the Data Management Plan from funded proposals, or use information from the Data Management Plan to produce a

formal metadata record and include that metadata in a Catalog to indicate the pending availability of new data.

Proposal submitters are hereby advised that the final pre-publication manuscripts of scholarly articles produced entirely or primarily with NOAA funding will be required to be submitted to NOAA Institutional Repository after acceptance, and no later than upon publication. Such manuscripts shall be made publicly available by NOAA one year after publication by the journal.

(6) Budget Table and Justification:

Budget Table: An itemized budget for all years and a total itemized budget must be included as a separate spreadsheet that breaks down the budget per object class category. Travel must be itemized to include destination, airfare, per diem, lodging, and ground travel.

For multiple applications associated with the same project, the Lead Principal Investigator should include a spreadsheet that displays the total budget for all partners. All partners, including the Lead Principal Investigator and any co-PIs from Federal Institutions, should include a separate budget for their portion of the project.

Budget Justification: A brief description of the expenses listed on the budget table and how they address the proposed work. Item justifications must include salaries, equipment, publications, supplies, tuition, travel, etc. Investigators who will not be requesting funds for salaries must also be listed, indicating their estimated time of commitment. Purchases of equipment greater than \$5000 must include a purchase versus lease justification.

(7) Federal Budget Forms: Budget numbers corresponding with the descriptions contained in the statement of work and budget table must be included. In addition to including the total budget on the SF424, the application must include the total budget and budgets for years 1, 2, and 3 in separate columns in Section B on page 1 on the SF424A. (Note that this revised 424A Section B format is a NOAA requirement that is not reflected in the Instructions for the SF 424A). Note that these forms are not part of the required page limit.

For multiple applications associated with the same project, each application requesting funding from NOAA needs to complete the federal budget forms for their specific institution.



(8) Indirect Costs: A copy of the institution's current Indirect Cost Rate Agreement (IDCRA) must be included. The IDCRA does not, however, count as part of the required page limit. To obtain an indirect cost rate if your institution does not already have one, a grantee must submit an indirect cost proposal to its cognizant agency and negotiate an indirect cost agreement. If an applicant has not previously (ever) established an indirect cost rate with a Federal agency they may choose to negotiate a rate with the Department of Commerce or use the de minimis indirect cost rate of 10% of MTDC (as allowable under 2 C.F.R. 200.414). The negotiation and approval of a rate is subject to the procedures required by NOAA and the Department of Commerce Standard Terms and Conditions Section B.06. The NOAA contact for indirect or facilities and administrative costs is: Lamar Revis, Grants Officer, NOAA Grants Management Division 1325 East West Highway, 9th Floor Silver Spring, MD 20910  
Lamar.Revis@NOAA.GOV.

(9) Vitae: Abbreviated curriculum vitae are requested with each application. Reference lists should be limited to all publications in the last three years with up to five other relevant papers. For multiple applications associated with the same project, each application should include identical vitae for all applications.

(10) Current and pending support: For each Principal Investigator and Co-Principal Investigator(s), submit a list of all current and pending Federal support that includes project title, supporting agency with grant number, investigator months per year, dollar value, and duration. Requested values should be listed for pending support. All letters of support must be submitted as part of the proposal and are included in the page limit for proposals.

For multiple applications associated with the same project, each application should include identical current and pending support information for all applications.

(11) DUNS Number: All applications must have a DUNS (Dun and Bradstreet Data Universal Numbering System) number when applying for federal grants. No application is deemed complete without the DUNS number, and only the Office of Management and Budget (OMB) may grant exceptions.

(12) National Environmental Policy Act (NEPA): NOAA must analyze the potential environmental impacts, as required by the National Environmental Policy Act (NEPA), of each applicant's project that is seeking NOAA federal funding opportunities. Detailed information on NOAA's compliance with NEPA can be found at the following NOAA NEPA website: <http://www.nepa.noaa.gov/>, including the NOAA Administrative Order 216-6 for NEPA, [http://www.nepa.noaa.gov/NAO216\\_6\\_TOC.pdf](http://www.nepa.noaa.gov/NAO216_6_TOC.pdf), and the Council of

Environmental Quality implementation regulations,  
[http://ceq.eh.doe.gov/nepa/regs/ceq/toc\\_ceq.htm](http://ceq.eh.doe.gov/nepa/regs/ceq/toc_ceq.htm).

No NEPA information is required with the initial application. However, after review of the application, NEPA information may be requested if NOAA determines such information is required.

Consequently, applicants may be required to provide detailed information on the activities to be conducted, locations, sites, species, and habitat to be affected, possible construction activities, and any environmental concerns that may exist (e.g., the use and disposal of hazardous or toxic chemicals, introduction of non-indigenous species, impacts to endangered and threatened species, aquaculture projects, and impacts to coral reef systems). In addition to providing specific information that will serve as the basis for any required impact analyses, applicants may also be requested to assist NOAA in drafting an environmental assessment, if NOAA determines an assessment is required.

Applicants may also be required to cooperate with NOAA in identifying feasible measures to reduce or avoid any identified adverse environmental impacts of their application. The failure to do so shall be grounds for not selecting an application. In some cases if additional information is required after an application is selected, funds can be withheld by the Grants Officer under a special award condition requiring the recipient to submit additional environmental compliance information sufficient to enable NOAA to make an assessment on any impacts that a project may have on the environment.

#### C. Submission Dates and Times

Letters of intent (LOIs) for all competitions (with the exception of the two MAPP Program competitions) should be received by email by 5:00 p.m. ET on August 24, 2016. Letters of Intent for the two MAPP Program competitions should be received by email 5:00 p.m. ET on August 26. A response to the LOI from the Competition Manager (e-mail or letter) will be sent to the investigator within four weeks after the LOI's due date encouraging or discouraging a full application based on its relevance to the targeted Competition.

#### 2. Full Applications

Full applications for all competitions (with the exception of the two MAPP Program competitions) must be received by 5:00 p.m. ET on October 24, 2016. Full applications for the two MAPP Program competitions must be received by 5:00 p.m. ET on October 31, 2016. Applications received after this time will not be considered for funding. Applications must be submitted via <http://www.grants.gov>. For applications submitted

through grants.gov, the basis for determining timeliness is the receipt notice issued by <http://www.grants.gov>, which includes the date and time received. Emailed or faxed copies of applications will not be accepted.

#### D. Intergovernmental Review

Applications under this program are not subject to Executive Order 12372, Intergovernmental Review of Federal Programs.

#### E. Funding Restrictions

Fees and profits are disallowed.

#### F. Other Submission Requirements

##### 1. Full Application

Applications are submitted through grants.gov "Apply for Grants".

If an applicant does not have Internet access, CPO Grants Manager Diane Brown should be contacted by mail at NOAA Climate Program Office (R/CP1), SSMC3, Room 12734, 1315 East-West Highway, Silver Spring, MD 20910 for hard copy submission instructions. Please allow two weeks after receipt for a response.

In order to submit an application through Grants.gov, an applicant must register for a Grants.gov user ID and password. Note that this process can take between three to five business days or as long as four weeks if all steps are not completed correctly. To avoid delays, applicants are strongly encouraged to start early and not wait until the approaching application deadline before registering, logging in, reviewing the application instructions, and applying. Information about the Grants.gov registration process for organizations can be found at [http://grants.gov/applicants/organization\\_registration.jsp](http://grants.gov/applicants/organization_registration.jsp).

Please note that organizations already registered with Grants.gov do not need to re-register; however, all registered organizations must keep their Grants.gov password and SAM database (which now incorporates CCR) registration up-to-date or their applications will not be accepted by Grants.gov. Note that your CCR username will not work in SAM. You must create a new SAM user account to renew or update your registration. Registration on SAM is a requirement. To obtain additional information and to verify that all required registrations are current, please visit [www.sam.gov/portal/public/SAM](http://www.sam.gov/portal/public/SAM).

If you experience a Grants.gov systems issue (technical problems or glitches with the Grants.gov website) that you believe threatens your ability to complete a submission before the application deadline, please do all of the following:

- Print any error message received
- Call the Grants.gov Contact Center at 1-800-518-4726 for immediate assistance
- Contact NOAA using the contact information in section VIII. of this FFO prior to the close of the competition
- Ensure that you obtain a case number regarding your communications with Grants.gov

In the event of a confirmed systems issue, NOAA reserves the right to accept an application in an alternate format prior to the application deadline. Problems with an applicant organization's computer system or equipment are not considered systems issues. Similarly, an applicant's failure to do the following are not considered systems issues:

- Complete the required registration
- Ensure that a registered AOR submits the application
- Read an email message with guidance from Grants.gov

## V. Application Review Information

### A. Evaluation Criteria

#### 1. Importance/Relevance and Applicability of Application to the Program Goals (Stage 1 Weight=0%) (Stage 2 Weight=100%) (Final Weight=25%)

This criterion ascertains whether there is intrinsic value in the proposed work and/or relevance to NOAA, federal, regional, state, tribal, or local activities. For the CPO Grant Program Competition, this includes importance and relevance to the scientific priorities of the selected Competition(s). The PI's record of making his/her data accessible and useable by the scientific community in the past, and the procedures described in Section IV.B(5) Data/Information Sharing Plan will also be considered when evaluating the importance and relevance of the application. For the CSI competitions, the above stated relevance score will also include the applicant's approach for engaging decision makers and building networks of relationships to help support decision makers with scientific information.

#### 2. Technical/Scientific Merit (Stage 1 Weight=70%) (Stage 2 Weight=0%) (Final Weight=52.5%)

This criterion assesses whether the approach is technically sound and/or innovative, if the methods are appropriate, and whether the goals of the Competition will be realized through clear project goals and objectives. For CSI competitions, the above stated merit score will also include the applicant's credibility in capacity-building approaches.

3. Overall Qualifications of Applicants (Stage 1 Weight=20%) (Stage 2 Weight=0%) (Final Weight=15%)

This criterion assesses whether the applicant team possesses the necessary education, experience, training, facilities, and/or administrative resources to accomplish the project. For CSI competitions, the above stated qualifications score will also include the PIs' record of collaborating with decision-making communities.

4. Project Costs (Stage 1 Weight = 10%) (Stage 2 Weight = 0) (Final Weight =7.5%)

This criterion evaluates the budget to determine if it is realistic and commensurate with the project needs and time frame.

5. Outreach and Education (Stage 1 Weight=0%) (Stage 2 Weight=0%) (Final Weight=0%)

This criterion assesses whether the project provides a focused and effective education and outreach strategy regarding NOAA's mission to protect the Nation's natural resources. For the CPO Grant Program Competitions, this criterion is not scored.

B. Review and Selection Process

Once a full application has been received, an administrative review will be conducted to determine compliance with requirements and completeness of the application. The reviews will take place in two stages. In Stage 1, independent peer mail reviewers and/or independent peer panel reviewers consisting of both Federal and/or non-Federal experts will evaluate applications using the following three criteria described above: technical/scientific merit, overall qualifications of applicants, and project costs. Relevance will be assessed separately in Stage 2. The panel will not give consensus advice. We protect the identities of reviewers to the extent permitted by law.

During Stage 1, each reviewer will provide one score for each of three criteria: technical/scientific merit, overall qualifications of applicants, and project costs for each application. The scores from the reviewers for each application will be combined using the weighting averages to produce a single numerical score for Stage 1. Occasionally a reviewer may, due to lack of familiarity in a particular area, choose not to score a particular application. Proposals that score a 3.0 or higher (out of a possible high score of 5) in Stage 1 will proceed to Stage 2.

If only a mail peer review is conducted for stage 1, proposals that score a 3.0 or higher (out of a possible high score of 5) in Stage 1 will proceed to Stage 2.

If a mail review and a panel review are both conducted for Stage 1, the mail reviews will be provided to the Stage 1 review panel for use in its deliberations prior to providing its

ratings, but the Competition Manager will use only the numerical rank order of the peer review panel to determine the average score for each proposal. Proposals that score a 3.0 or higher (out of a possible high score of 5) in Stage 1 will proceed to Stage 2.

In Stage 2, scores for Importance/Relevance and Applicability of Application to the Program Goals will be determined by a second panel comprising either Federal or a combination of Federal and non-Federal partners. Each panel reviewer will provide a relevance score for each application that moved forward from Stage 1. The Stage 2 panel will not give consensus advice. The applications and their associated scores from Stage 1 will be provided to the Stage 2 panel.

The Stage 1 and Stage 2 weighting of scores for the individual criteria is shown in the following table:

Criterion	Stage 1 Weight	Stage 2 Weight	Final Weight
Importance and Relevance/Applicability	0%	100%	25%
Technical/Scientific Merit	70%	0%	52.5%
Overall Qualifications of Applications	20%	0%	15%
Project Costs	10%	0%	7.5%
Outreach and Education	0%	0%	0%
Stage Total	100%	100%	100%
Final weighting for each stage score	75%	25%	100%

To determine the final score, the scores from Stage 1 and Stage 2 will be combined, with a weighting of 75% for the Stage 1 score and 25% for the Stage 2 score, leading to the overall weightings for each criterion reported in section V.A above. The final score for each application will be used to determine the numerical rank order of proposals within each Competition.

The Competition Manager will recommend applications to the Selecting Official in numerical rank order unless a recommendation out of rank order is justified based upon any of the factors listed in the following section. Should applications receive a tie score, and funding is not available for every tied application, the Competition Manager may preferentially recommend applications for funding also according to any of the factors listed in the following section. The Competition Manager will review the amounts requested for each selected application (including costs for computing and networking services) and recommend the total duration and the amount of funding, which may be less than the application and budget requested.

### C. Selection Factors

The Selecting Official shall select awards in rank order unless a selection out of rank order is justified based upon any of the selection factors. Should applications receive a tie score, and funding is not available for every tie application, the Selecting Official may preferentially recommend applications for funding also in accordance with any of the selection factors. The selection factors are as follows:

- Availability of funding
- Balance/distribution of funds:
  - Geographically
  - By type of institutions
  - By type of partners
  - By research area
  - By project types
- Duplication of other projects funded or considered for funding by NOAA/Federal agencies
- Program priorities and policy factors
- Applicant's prior award performance
- Partnerships with/participation of targeted group
- Adequacy of information necessary for NOAA staff to make a NEPA determination and draft necessary documentation before recommendations for funding are made to the Grants Officer.

The Selecting Official makes final recommendations for awards to the Grants Officer who is authorized to obligate the funds.

### D. Anticipated Announcement and Award Dates

Subject to the availability of funds, review of applications will occur during the 6-7 months following the full applications due date. CPO anticipates that funding decisions on applications will be made during spring 2017. Such decisions are contingent upon the final FY 2017 appropriation for NOAA by Congress and the final allocation of funds

to CPO by NOAA. Funding for successful applicants is expected to begin during spring-summer 2017 for most approved projects. Applications should use **July 1, 2017**, as the start date unless otherwise directed by the Competition Manager.

## VI. Award Administration Information

### A. Award Notices

The Grants Officer will provide notice to the applicant that they have received the award. Successful applicants will receive notification that the application has been recommended for funding by an official of the NOAA Climate Program Office. This notification is not an authorization to begin performance of the project. The official notification of funding, signed by a NOAA Grants Officer, is the authorizing document that allows the project to begin. Notifications will be issued to the Authorizing Official and the Principal Investigator of the project. Unsuccessful applicants will be notified that their application was not selected for recommendation.

### B. Administrative and National Policy Requirements

Administrative and national policy requirements for all Department of Commerce awards are contained in the Department of Commerce Pre-Award Notification Requirements for Grants and Cooperative Agreements published in the Federal Register on December 30, 2014(79 FR 78390). You may obtain a copy of this notice by contacting the agency contact, or by going to the website at <http://www.gpoaccess.gov/fr/index.html>.

**Limitation of Liability:** In no event will NOAA or the Department of Commerce be responsible for application preparation costs. Publication of this announcement in no way obliges NOAA to award any specific project or to obligate any available funds.

**National Environmental Policy Act (NEPA):** The National Environmental Policy Act is applicable to the Notice. See Section IV above for the necessary information.

### C. Reporting

Award recipients are required to submit financial and technical progress reports. These reports are to be submitted electronically via <https://grantsonline.rdc.noaa.gov>. The first technical progress report covering the first nine months of a multi-year award is due 10 months after the start date of the award. Each subsequent technical progress report covering a period of 12 months is due 12 months after the previous report. The comprehensive final technical progress report is due 90 days after the expiration date of the award. Technical progress reports should report on adherence to the Data/Information Sharing Plan (see §2e) and all listed publications resulting from the grant should adhere to the requirements established in said section.



Unpaid or Delinquent Tax Liability: in accordance with current Federal appropriations law, NOAA will provide a successful corporate applicant a form to be completed by its authorized representatives certifying that the corporation has no Federally-assessed unpaid or delinquent tax liability or recent felony criminal convictions under any Federal law.

The Federal Funding Accountability and Transparency Act of 2006: this Act includes a requirement for awardees of applicable Federal grants to report information about first-tier sub-awards and executive compensation under Federal assistance awards issued in FY 2011 or later. All awardees of applicable grants and cooperative agreements are required to report to the Federal Sub-award Reporting System (FSRS) available at [www.FSRS.gov](http://www.FSRS.gov) on all sub-awards over \$25,000.

## VII. Agency Contacts

Please visit the CPO website for further information at or contact the CPO Grants Manager, Diane Brown, by mail (see address above) or at [diane.brown@noaa.gov](mailto:diane.brown@noaa.gov). Please allow up to two weeks after receipt for a response.

## VIII. Other Information

None.